

US Serial No. 10/501177
Page 2 of 17

In the Specification:

With reference to US 2005/0065056, kindly delete paragraphs [0062] - [0073] as follows:

Examples

— Examples of compositions for use with the present invention are shown in Table 1 below, the amounts of each of the named constituents represent the %wt. of the named constituent in an example formulation, and each of the named constituents were used "as supplied" by their respective manufacturer. The identity of each of the named constituents, including the %actives is indicated on Table 2. Certain of the example compositions illustrate particularly preferred embodiments of the cleaning compositions used in the cleaning articles according to the present invention.

Table 1

	Ex.1	Ex.2	Ex.3	Ex.4	Ex.5	Ex.6	Ex.7	Ex.8	Ex.9
Dureel 15	30	30	30	30	30	30	30	30	30
Empilan KR6	2	2	2	2	2	2	2	2	2
Hostapur SAS-30	2	2	2	2	2	2	2	2	2
Dantogard	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Perfume	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Laponite RD	0.5	1	0	0	1	0	1	1	0
Rhodopel 50-MD	0.4	0.3	0.3	0.5	0.5	0.3	0.3	0.5	0.5
isopropanol	2	0	4	0	4	0	4	0	4
Rhodorsil 47V-12,500	0.78	0.05	0	1.5	0.05	0.05	1.5	1.5	0.05
Water-D.I.	61.7	64.1	61.1	63.4	59.9	65.1	58.6	62.4	60.9

US Serial No. 10/501177
Page 3 of 17

Table 4

	Ex.10	Ex.11	Ex.12	Ex.13	Ex.14	Ex.15	Ex.16	Ex.17	Ex.18
Dureal 15	30	30	30	30	30	30	30	30	22.5
Empilen KR6	2	2	2	2	2	2	2	2	2
Hestapur SAS 30	2	2	2	2	2	2	2	2	2
Dentogard	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Perfume	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Laponite RD	0	1	0	1	0	0	1	1	1
Rhodopel 50 MD	0.3	0.5	0.5	0.3	0.5	0.3	0.5	0.3	0.425
isopropanol	0	0	4	4	0	4	4	0	4
Rhodorsil 47V 12,500	1.5	0.05	1.5	0.05	0.05	0.05	1.5	1.5	1.5
Martipol PN-505	—	—	—	—	—	—	—	—	7.5
Water D.I.	63.6	63.9	59.4	60.1	64.9	61.1	58.4	62.6	58.475

The scouring agents may vary in hardness, particle size and shape, and the choice for a particular composition is generally dependent on the contemplated field of application. The sizes of the abrasive particles are normally less than 0.5 mm., and in general, the maximum particle size of substantially all of the abrasive is under 0.15 mm. In certain preferred embodiments, two (or more) scouring agents having different hardnesses are present in the cleaning compositions. Typically a minor amount of a more abrasive or "harder" scouring is present with a major amount of a less-abrasive or "softer" scouring agent(s). Such a combination often provides improved cleaning of soils, with reduced likelihood of scratching cleaned surfaces.

The cleaning compositions used in the cleaning articles comprise 0-10%wt., preferably 0.01-5%wt., more preferably 0.05-3.5%wt., and most preferably from 1-3%wt. of one or more thickening agents in order to modify the viscous and/or thixotropic properties thereof. In especially preferred embodiments of the invention, the cleaning compositions which are impregnated into the first portion of the substrate are thickened so to improve their retention within the substrate. Further the presence of a thickener in

US Serial No. 10/501177

Page 4 of 17

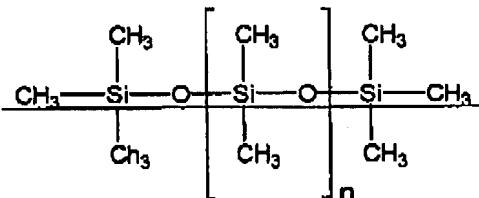
~~the cleaning composition is desirable in providing a means to apply the cleaning composition over a limited area, such as directly onto a stain on a vitro ceramic surface, without applying an excess onto the surrounding area of the vitro ceramic surface. Known art thickening agents may be used. By way of non-limiting example these include natural or modified natural gums are xanthan gum, guar gum, and carob gum, carrageenates, alginates such as sodium alginate and propylene glycol alginate, cellulose and cellulose derivatives, such as the carboxymethylcelluloses, hydroxyalkylcelluloses, and clays such as bentonite clays, kaolin clays, hydrous silicates, as well as polymeric thickeners such as CARBOPOL® resin materials, as well as and mixtures of two or more thickeners.~~

~~The cleaning compositions used in the cleaning articles comprise 0-10%wt., preferably 0.01-7%wt., more preferably 0.05-5%wt., and most preferably from 0.5-4%wt. of one or more organic solvents. Exemplary organic solvents which may be included in the inventive compositions include those which are at least partially water-miscible such as alcohols, ethers, water-miscible ethers (e.g. diethylene glycol diethylether, diethylene glycol dimethylether, propylene glycol dimethylether), water-miscible glycol ether (e.g. propylene glycol monomethylether, propylene glycol mono ethylether, propylene glycol monopropylether, propylene glycol monobutylether, ethylene glycol monobutylether, dipropylene glycol monomethylether, dipropylene glycol monopropyl ether, dipropylene glycol monobutyl ether, diethylene glycol monobutylether), lower esters of monoalkyl ethers of ethyleneglycol or propylene glycol (e.g. propylene glycol monomethyl ether acetate). Mixtures of several organic solvents can also be used.~~

~~The cleaning compositions used in the cleaning articles comprise 0-7%wt., preferably 0.01-5%wt., more preferably 0.05-3%wt., and most preferably from 0.5-2%wt. of an organopolysiloxane. In particularly preferred embodiments the cleaning compositions comprise at least about 1%wt. of an organopolysiloxane. The organopolysiloxanes are generally supplied as fluids, and are often referred to as silicone fluids and are basically dimethylpolysiloxane fluids, which are substantially linear in~~

US Serial No. 10/501177
Page 5 of 17

~~nature. The structure of the dimethylsilicone fluid is shown by the following general formula:~~



wherein n is the number of repeating groups present. By substitution of some of the methyl groups with other organic or organo-functional groups, such as vinyl, phenyl, trifluoropropyl, and amino, other organopolysiloxane fluids can be produced, and which may also be used in the inventive compositions. Generally organopolysiloxane fluids are available as mixtures of polymers of varying chain length. It has been found for purposes of the invention that the viscosity of the silicone fluids is a measure of the effectiveness. Silicone fluids can be used which have a viscosity range up to about 100,000 centistokes. Preferably, the viscosity of the silicone fluids to be used should be in the range of from about 300 centistokes up to about 25,000 centistokes, preferably from about 8,000 15,000 centistokes, and most preferably in the range of about 10,000 15,000 centistokes.

Typically such organopolysiloxane fluids, especially dimethylpolysiloxane fluids are provided as aqueous emulsions, and such aqueous emulsions are available from a number of commercial sources. Such aqueous emulsions usually contain from about 35% to about 50% by weight of a silicone fluid or fluid mixture, with the remainder being mostly water and small amounts of emulsifier and adjuvant materials such as a rust inhibitor.

The cleaning compositions used in the cleaning articles comprise 0.3%wt., preferably 0.1-3%wt., more preferably 0.5-2%wt. of an acid. While not essential in all compositions, the present inventors have found that the inclusion of even a minor amount, e.g., at least 0.5%wt. of an acid constituent in the cleaning compositions greatly improves the removal of hard water stains from a surface, particularly a *vitro*-ceramic surface being treated. The acid may be any water soluble or water dispersible acid, and may be an organic acid or an inorganic acid. Exemplary inorganic acids include

US Serial No. 10/501177
Page 6 of 17

hydrochloric acid, sulfamic acid, phosphoric acids as well as other inorganic acids. Particularly useful organic acids include water soluble organic acids having from 1 to 6 carbon atoms, and include at least one carboxyl group (-COOH) in its structure. Particularly useful as water soluble organic acids are formic acid, lactic acid, citric acid, and glycolic acid, and most preferably the acid constituent is citric acid.

The cleaning compositions used in the cleaning articles may comprise 0 - 5% wt., preferably 0 - 3% wt., or one or more conventional optional additives known to the art but not expressly enumerated here may also be included in the compositions according to the invention. By way of non limiting example without limitation these may include: chelating agents, coloring agents, light stabilizers, fragrances, hydrotropes, pH adjusting agents, pH buffers. Many of these materials are known to the art, per se, and are described in McCutcheon's Detergents and Emulsifiers, North American Edition, 1998; Kirk-Othmer, Encyclopedia of Chemical Technology, 4th Ed., Vol. 23, pp. 478-541 (1997), the contents of which are herein incorporated by reference. Such optional, i.e., non-essential constituents should be selected so to have little or no detrimental effect upon the desirable characteristics of the present invention.

Water is added to the above components in order to provide 100% by weight of the composition. The water may be tap water, but is preferably distilled and is most preferably deionized water. If the water is tap water, it is preferably substantially free of any undesirable impurities such as organics or inorganics, especially minerals salts which are present in hard water which may thus interfere with the operation of the above components as well as any other optional components that may be present.

The cleaning compositions are supplied to the first portion of substrate of the cleaning article by any conventional means, including but not limited to dipping, spraying, dousing and the like. Preferably the barrier is supplied to the substrate prior to or during the application of the cleaning composition to the first portion of the substrate. As noted above, each substrate may have one or more first portions to which a quantity of the cleaning composition is applied. Also as noted, the cleaning article may assume a variety of physical configurations, such as a sheet form having two sides divided by a

US Serial No. 10/501177
Page 7 of 17

~~barrier, or a top layer and bottom layer separated by an intermediate barrier layer. The amount of cleaning composition which may be applied to a cleaning article may vary widely due to a variety of factors including the composition of the substrate and its capacity to absorb the cleaning composition, the viscosity of the cleaning composition as well as other factors. Generally good results are obtained when the cleaning composition is supplied to the first portion of the substrate in an amount of from about 2 to about 5 grams per gram of the substrate material, preferably from about 2 to about 4. grams per gram of the substrate material. Alternately, and in certain preferred embodiments the cleaning composition is applied to the substrate in respective weight:weight ratio of cleaning composition:substrate of 1.2-5:1, preferably 1.5-4:1.~~

~~In a further aspect there is provided an improved method for the treatment of vitro-ceramic surfaces and especially vitro-ceramic cooking surfaces which method contemplates the use of the improved cleaning articles described herein. A cleaning article is removed from its package, and the first portion of the cleaning article is applied to a soiled surface, especially a vitro-ceramic surface and used to manually spread the cleaning product and clean the soiled surface. The presence of the abrasive within either the cleaning composition or as part of the substrate forming the first portion facilitates the removal of soils. Thereafter, the first portion of the cleaning article is removed, the second portion of the cleaning article is used to manually buff the treated surface to provide a shined, cleaned appearance. Thereafter the cleaning article is discarded. The presence of an organosilicone in the cleaning composition not only provides for good shine to the cleaned surface, but may also provide a protective coating to the cleaned surface, particularly cleaned vitro-ceramic surface. Therefore the inclusion of an organosilicone in the cleaning composition is highly advantageous and preferred.~~

With reference to US 2005/0065056, immediately prior to paragraph [0086], kindly amend the table as follows:

US Serial No. 10/501177
 Page 8 of 17

Table 1

	<u>Ex.19</u>	<u>Ex. 20</u>	<u>Ex.21</u>	<u>Ex.22</u>	<u>Ex.23</u>	<u>Ex.24</u>
	10	11	12	13	14	15
Durcal 15	30	30	30	--	--	--
Empilan KR6	2	2	2	2	2	2
Hostapur SAS 30	2	2	2	2	2	2
Ammonyx MCO	--	--	--	2	--	--
Dantogard	0.2	0.2	0.2	--	--	--
Copak DT-60	--	--	--	0.2	0.2	0.2
Perfume	0.4	0.4	0.4	--	--	--
Laponite RD	0	1	0	--	--	--
Bentonite clay	--	--	--	1	1.5	1
Kaolin clay	--	--	--	--	--	5
Citric acid (anhydrous)	--	--	--	2	2	2
Rhodopol 50-MD	0.3	0.5	0.5	0.5	0.5	0.4
isopropanol	0	0	4	--	--	--
Rhodorsil 47V 12,500	1.5	0.05	1.5	1	0.5	0.5
Martipol PN-505	--	--	--	5	--	--
polyurethane abrasive	--	--	--	5	5	5
diatomaceous earth	--	--	--	--	5	--
Water D.I.	63.6	63.9	59.4	86.3	81.3	81.9